Pharmaceutical Review—A View from Academia

A key issue in delivery of health services is the training required to deliver, as well as to 'quality assure' those services. Furthermore, there are clear differences between the types of education and training required to achieve different educational objectives, for example, qualification for practice, demonstration of competency, or credentialing to provide a specific (higher level or specialist) service.

Among many health professionals, training encompasses a mixed model of on-campus and experiential and clinical training in healthcare settings and related organisations. This training may be along a continuum from undergraduate to continuing education in postgraduate programs.

Universities have a set of 'graduate attributes' that are general to the tertiary community, as well as profession-specific requirements of our graduates. The universities provide education and training to ensure our pharmacy graduates are prepared to meet entry level competencies (after they have successfully completed postgraduate, preregistration experience, and have met the state-based requirements for registration as a pharmacist). Many universities provide postgraduate pharmacy courses—these courses may have a range of different objectives—in research training as well as updating knowledge and 'upskilling' in a range of specialist therapeutic areas and services.

Implementation of pharmaceutical review will require a workforce that can move through a structured career path which includes experience, practice development and relevant formal training. To provide support for training to provide higher level practice, as in the UK model, then any postgraduate training provided by the universities would of course need to be directly relevant to and 'twinned' with the practice environment.

Partnerships between the universities and the health services are needed to develop and deliver such courses. The aims, content and delivery of these courses will have to be developed in these partnerships. There may be the possibility of consortia among universities to accredit clinical training, or to combine the delivery of courses from both the health services and the universities.

Given workload pressures, we will have to find new ways to facilitate access by current practitioners to formal training programs. Different approaches might include more flexible course delivery, online resources, release time, secondments, clinical residencies, as well as other innovative ways of providing and undertaking further training in the crowded workplace. This need for ongoing training will also be taking place in the environment where there are ongoing and increasing pressures to accommodate the training of undergraduate students. Our hospitals are already 'crowded' in terms of students on placements and also in terms of workload pressures.

However, these are predictable challenges, and are not insurmountable—as long as there is timely, collaborative work undertaken by the university and hospital sectors. The benefits of a well-trained, 'pharmaceutical review-ready' set of practitioners will be a very valuable investment in the future of hospital pharmacy practice.

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A number of individuals have offered editorial comments about pharmaceutical review, from a range of perspectives. It seems that pharmaceutical review, around the country might provide the impetus to achieve many advances in the organisation of pharmacy services. Many of these services may have been identified previously, and some are currently in practice. Pharmaceutical review may provide opportunities to formalise the 'language' around statements of competencies for practice, to achieve a national approach to frameworks for general and advanced level practice, career paths and definitions of pharmacy activities and services in the context of health service delivery. This may be a long awaited opportunity to bring pharmacy into the 'mainstream' of clinical services delivery in hospitals, and more broadly.

If pharmaceutical review can achieve this—we must seize the opportunity. The journal provides a forum for discussion about pharmaceutical review, and other issues. We await your letters and manuscripts!

Pharmaceutical Review—Queensland Health's Experience

In 1990 Charles Hepler and Linda Strand published a sentinel paper and coined the term 'Pharmaceutical Care'. This was defined as 'that component of pharmacy practice which entails the direct interaction of the pharmacist with the patient for the purpose of caring for that patient's drug-related needs'.[1]

In 1996 the Regional Pharmaceutical Officers' Statement of Principles and Standards of Good Practice for Hospital Pharmacy in the UK stated that 'All patients will receive the medicines to meet their agreed therapeutic objectives throughout the course of their treatment. This requires that the care plan for each patient identifies the correct choice of medication and is supported by systems for the provision of medicines…' and 'Patients will be assessed to determine their pharmaceutical care needs and to minimise risk factors likely to prejudice the outcome of their care'.

In 2003 The Society of Hospital Pharmacists of Australia (SHPA) Standards of Practice for Clinical Pharmacy, were published utilising these core concepts and applied them to Australian health care.[2]

In April 2004, all Australian Health Ministers agreed, as one of seven key patient safety deliverables, that public hospitals should: 'provide a pharmaceutical review of prescribing, dispensing, administration and documentation of medications for all inpatients by December 2006'.[3] This bold and encompassing statement places the hospital pharmacist central to the delivery of quality use of medicines. It also defines that services should be delivered to a minimum standard promoting the standards espoused by hospital pharmacists.

Well intentioned agreements require subsequent processes that result in tangible changes in patient care. These processes are often torturous and difficult to implement. The lack of any definition of what constitutes pharmaceutical review, the lack of appropriately trained staff and the pressure to deliver on many administrative tasks have combined to inhibit change in Australian pharmacy practice. Many considered that this was just 'a bridge too far' and in the end pharmacists would continue to try to provide their very well intentioned but sometimes inefficient clinical services.

However, in Queensland Health, the Safe Medication Practice Unit (SMPU) was provided with the resources to establish a reproducible process to assist the pharmacy workforce to achieve this ministerial commitment. Firstly, a working definition for pharmaceutical review was adapted from that developed by the Australian Council for Safety and Quality in Health Care and

endorsed by Queensland Health in 2005: 'A minimum standard of systematic appraisal of all aspects of patients' medication management within an institution conducted (or supervised) by a qualified and suitably trained health professional (ideally a pharmacist) acting as part of a multidisciplinary team. It includes objective review of medication prescribing, dispensing, distribution, administration, monitoring of outcomes and documentation of medication related information in order to optimise the quality use of medicines (QUM)'.

The key activities encompassed within pharmaceutical review have been agreed by senior clinical pharmacy, medical and nursing staff and align closely with the Australian Pharmaceutical Advisory Council (APAC) Guiding Principles to Achieve Continuity in Medication Management, to which Queensland Health, like many other states has made a commitment, as a component of the pharmaceutical reform agenda. Similarly, they are aligned with the SHPA Standards of Practice for Clinical Pharmacy, and the combined Pharmacy Professional Competency standards of practice.[2] In addition there are, albeit relatively vague, capability frameworks for pharmacy services which describe the core activities that should occur in different size sites. With many definitions, standards and guidelines, there is a risk that they remain on shelves or desk tops and never result in any meaningful improvement in patient outcomes.

An essential prerequisite to change is to understand the current standard of pharmaceutical review, how frequently reviews are performed and to identify the gaps and then agree efficient processes by which effective services can be developed. The General Level Framework (GLF), produced by the Competency Development and Evaluation Group (CODEG) in South East England <www.codeg.org> and implemented by many acute hospitals in the NHS in England and further afield, was a response to the need to provide a consistent standard of clinical pharmacy practice at an individual and service level.[4] The GLF consists of three competency clusters: delivery of patient care, problem solving and personal attributes. Each competency is described by a series of behavioural indicators. The delivery of patient care cluster, focuses on clinical performance and is aligned to the pharmaceutical care or drug use process and reflects upon core service areas such as medication history taking and reconciliation, drug problem prevention, identification and resolution. The personal and problem solving clusters describe the generic skills of individuals such as core knowledge required, ability to communicate effectively and work as part of a team whilst being effective and efficient.[5]

The GLF allows self and peer objective evaluation of performance, enables feedback to individuals and managers on the level and standard of practice and allows targeted objectives to be set for individuals and services, using objective outcomes. Evidence from a controlled study demonstrates that when utilised regularly among those delivering a level of service consistent with post-registration practice (termed 'general level pharmacists'), a significant and sustained improvement in patient care competencies was demonstrated when compared to control sites.[6]

The process undertaken in Queensland has been to agree to definitions, develop and agree to a framework that assists prioritisation of clinical tasks essential to good patient care based on high-risk medicines and high-risk patient groups. This risk-based patient prioritisation was then mapped to activities as outlined in the SHPA core standards and agreed at workshops by senior clinical pharmacists. The GLF has now been formally adopted, in collaboration with CODEG, to deliver the recommendations outlined in the APAC principles and SHPA Standards of Practice for Clinical Pharmacy. The amended GLF was endorsed by Queensland Health Directors of Pharmacy in October 2006. It describes the pharmaceutical review activities expected of a competent general level pharmacist after undertaking minimum experiential training. In addition, this practical tool to evaluate pharmacists, provide feedback and direct clinical practitioners' behaviours will go a long way to meet the objectives of the new Safety and Quality Commission to establish appropriate credentialing processes for all clinicians. Perhaps, in this area pharmacy may now be a leader rather than a follower.

The process has been extremely well received by practitioners with over half of Queensland Health sites now utilising this process with all sites involved by the end of February 2007. The majority of clinicians have previously never received any objective evaluation and feedback on their clinical practice. Most importantly, virtually all have seen it as a positive and constructive process and a number of sites are undergoing second rounds of evaluation. Many of the gaps identified are system issues, such as the need for a standardised approach to medication history taking, documentation, confirmation and reconciliation, both within and between institutions. This in itself has resulted in a statewide approach to a medication action plan, one of the core components of the process described both in the APAC guidelines and SHPA Standards of Practice for Clinical Pharmacy.

Re-evaluations of practitioners are now occurring two to three times a year, depending on resources. Large sites with established training and mentor positions have quickly become independent. Small sites have been assisted with training and support by SMPU to undertake both the assessments and feedback process and establish local clinical training. In addition, gaps identified in the process of patient consultation, problem prioritisation and effective resolution with medical, nursing staff and patients has resulted in a skills-based training program being developed, adapted from the already established preregistration induction course. This will be run repeatedly each year by SMPU to assist with practitioner development and training.

Clearly, appropriate numbers as well as competencies of staff are required to deliver pharmaceutical review and a gap analysis has been undertaken against the suggested pharmacist-to-patient ratios and used to direct a parallel and essential component of work which is under way to identify staffing needs and link with a service capability program to clearly identify what pharmacy resources are required by Queensland Health to deliver the key essential pharmacy services.[2] The initial gap analysis has already resulted in a significant increase in the number of preregistration pharmacist positions which has increased from less than 20, three years ago to almost 60 across the state by January 2007.

To ensure a sustainable system and maintain enthusiasm for this process, a revised career framework is being developed as part of an ongoing interest-based bargaining process, which hopes to establish a totally revised career framework, service delivery model and training and development program with a revised recruitment and retention strategy by 2008.

A pharmaceutical review deliverable has been a catalyst for a practitioner and service development process, in Queensland Health facilities. National endorsement of a GLF for delivery of pharmaceutical review activities could be a constructive approach with hospital pharmacy leading the way in the new era of health services' standards ensuring that appropriate practitioners are being developed or are practising at the appropriate standard to deliver acceptable patient care. Let hospital pharmacists not wait for the policy makers to tell them how to implement their policies. Let them demonstrate that they are, together with multidisciplinary colleagues, both innovators and implementers of essential components of the appropriate standard of medication management for Australian patients.

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Pharmacy Services to Improve Continuity of Care—Is It Time for a National Approach?

In South Australia, pharmacy service models to improve quality use of medicines for patients along the continuum of care between hospital and community have been developed over the last ten years. These models have more recently been coined Medication Management Services. All other States and Territories have likewise progressed these services to address the implementation of APAC guidelines.[1] These evolving pharmacist roles have been referred to with various titles including Community Liaison Services, Medication Liaison Services and Hospital Outreach Medication Reviews. I would like to suggest that it is time we have a national consensus approach to determining a common title for these services and development of standards of practice, competencies and an evaluation framework.

In my experience, to achieve optimal patient outcomes along the continuum there are essential service requirements. It is imperative that the title defining these pharmacist activities within the current Australian healthcare system adequately reflects all of these requirements.[2,3] Foremost, this involves effective communication transfer with accurate, comprehensive and timely transfer of patient-specific medication information that relies on bi-directional not uni-directional flow of information across the interface. Integration and coordination within the healthcare team is also paramount, as is flexibility to span across all healthcare settings including domiciliary, residential aged care and transition care. Flexibility relates to not only to setting but also the ability to link with existing services in the community—either facilitating the ongoing community service or providing the service where there is a gap in patient care. Hence, I do not believe that words such as 'community' (inferring that these activities are setting based) or 'liaison' (inferring that facilitation is the only requirement) are necessarily the best descriptors of these pharmacist roles.

Are Hospital Outreach Medication Reviews perceived by Australian pharmacists to be the same as Medication Management Services and are Medication Management Services perceived to be the same as Clinical Pharmacy Services? Inherent in the answers to these questions is a paradigm shift from hospital pharmacists relinquishing responsibility for patient care once the patient is transferred to providing a clinical pharmacy service that claims responsibility for ongoing care as the patient moves out of the hospital front doors into the community. Maybe we have all reached this paradigm shift, maybe not, however it is definitely time to have these discussions at a national level, if nothing else, so that when referring to these evolving pharmacist roles everyone is on the same playing field.

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Pharmaceutical Review—A Lost Opportunity?

In 2004 the Australian Health Ministers released a joint communiqué which called for a process of pharmaceutical review of medication prescribing, dispensing, administration and documenting processes for the use of medicines to be available in every hospital by the end of 2006. Was this a mandate for the pharmacy profession to come forward and take responsibility and be accountable for the safe, effective and judicious use of medicines in our hospitals?

I feel that the concept of pharmaceutical review was borne out of the safety in healthcare agenda and was an opportunity to show that pharmacists can make a real and significant contribution to reducing harm and improving outcomes associated with the use of medicines. Pharmaceutical review essentially brings together the principles of the Quality Use of Medicines, the Guiding Principles for Medicines Management in the Community and The Society of Hospital Pharmacists of Australia's Standards of Practice for Clinical Pharmacy, but needs to function not only at the individual patient level but also at the hospital and health systems level. It thus needs to be a multidisciplinary approach with the need to break down the silos between the different health professionals involved in patient care. Pharmacists are ideally placed for this task, as we have the key knowledge and skills in this area, to take a leadership role in defining and implementing what pharmaceutical review might look like in practice.

The time has come for us to stop abdicating responsibility to other healthcare staff and be present to carry out medication histories, to identify medication-related problems, to formulate medication action plans and to monitor outcomes for all patients. This means being available outside of normal office hours, in all areas of the hospital where medicines are used and in hospitals outside of the urban and metropolitan areas. We need to develop relationships with rural hospitals and with health centres in remote communities and inspire the new generation of pharmacists to have a broader view of hospital pharmacy practice. This, coupled with the use of technologies such as voice and video over Internet, electronic medicine management systems and robotics for remote dispensing, will allow us to create new types of therapeutic relationships with people as they move through the continuum of care boundaries regardless of where they live.

The end of 2006 is upon us, we need national co-ordination and leadership from within the profession to ensure that pharmaceutical review is not a lost opportunity.